

## 田 川 基 二\*: 羊 齒 類 雜 說 (4)

## Motozi TAGAWA\*: Fern miscellany (4)

(44) *Onychium contiguum* (Wall.) Hope, Journ. Nat. Hist. Soc. Bombay 13: 444. 1901; Ching, Lingnan Sci. Journ. 13: 498. 1934, cum syn.; Ic. Fil. Sin. 4: pl. 161. 1937.

Formosa. Prov. Tainan: Tâtake in the Arisan mountains, ca. 2700 m. alt., I. Simozawa 2 (K\*\*). Prov. Takao: between Takimi and Hinode, ca. 2000 m. alt., Kizan-gun, S. Okamoto (K).

First described from Nepal. New to Formosa, hitherto known from Himalayas, Tibet, Siam, Yunnan, and Szechwan (after Ching, l. c.).

(45) *Asplenium ensiforme* Wall.

var. *ensiforme*.—*Asplenium ensiforme* Wall. ex Hook. et Grev. Ic. Fil. t. 71. 1829, type from North India. Indusiis concoloribus, ubique pallide brunneis, margine irregulariter denticulatis.

India to south-west China, and in Tonking.

*Asplenium bicuspe* Hayata from Formosa, which has been referred to continental *A. ensiforme* by H. Ito (cf. Journ. Jap. Bot. 14: 444. 1938), is distinguished as a variety by the presence of two-coloured entire indusia.

var. *bicuspe* (Hayata) Tagawa, comb. nov.—*Diplazium bicuspe* Hayata, Ic. Pl. Form. 4: 214, f. 146. 1914, type from Arisan, Formosa.—*Asplenium bicuspe* Hayata, l. c. as syn.; Ogata, Ic. Fil. Jap. 7: pl. 303. 1936.

Indusiis bicoloribus, praeter marginem brunneum fere integrum ubique pallide brunneis.

Formosa throughout, not uncommon, growing on mossy tree-trunks in the thick forests of mountains at 1500–3000 m elevation.

H. Ito recorded *A. ensiforme* from Kyûsyû, Japan (cf. H. Ito, l. c.); I don't know whether the Japanese plant represents var. *ensiforme* or var. *bicuspe*.

(46) *Athyrium subtriangulare* (Hook.) Bedd. Ferns Brit. Ind. t. 242. 1868.—*Asplenium subtriangulare* Hook. in Hook. et Bak. Syn. Fil. 225. July 8, 1867, type from Sikkim.—*Asplenium spinulosum* (Maxim.) Milde var. *subtriangulare* (Hook.) Clarke, Tr. Linn. Soc. II. Bot. 1: 487. 1880.—*Athyrium*

\* Department of Botany, Faculty of Science, University of Kyoto, Kyoto, Japan.

\*\* K indicates the Herbarium of the University of Kyoto.

*Hookerianum* Moore (Ind. Fil. 185. 1860, nom. nud., based on Sikkim plant, probably a typonym of *Asplenium subtriangulare* Hook.) ex Milde, Fil. Eur. 57. not earlier than July 1867, as to Sikkim-Himalayan plants.—*Asplenium spinulosum* and *Athyrium spinulosum* of authors on Sino-Himalayan flora.

China. Sikang: Kangting (Tachienlu) distr.: Chungo valley: Mt. Yara, NE. slopes, in silva mixta, ca. 3000 m s. m., H. Smith 11157 (K).

Sikkim-Himalayas to West China.

This species is, no doubt, most closely related to *A. spinulosum* (Maxim.) Milde, but the lamina is ovate-deltoid, its breadth being a little shorter than the length, the lower pinnae are more or less ascending, the pinnules are oblong, close together, and strictly sessile, the segments being patent, close together, and inciso-serrate into rather patent, short-spinulose teeth. In *A. spinulosum* the lamina is broad-ovate-deltoid, its breadth being a little longer than the length; the lower pinnae are nearly horizontal; the pinnules are oblong-lanceolate, remote, and usually short-petiolate, the segments being more or less ascending and remote, inciso-serrate into rather ascending spinulose teeth.

(47) *Polystichum Kurokawae* Tagawa, Acta Phytotax. Geobot. 14: 17. 1949, nom. nud.

Habitu, divisione, colore, textura, amplitudine *P. ovato-paleaceo* valde similis, ab ea specie abunda differt: squamis inferioribus stipitis oblongo-lanceolatis vel ovato-oblongis, 1.5–2 cm longis, 5–7 mm latis, bicoloribus, centre castaneis nitidis rigidis, margine pallide brunneis membranaceis parcissime ciliatis, squamis rachidis minoribus, ovato-lanceolatis longe acuminatis, concoloribus pallide brunneis, inferioribus vix ultra 5 mm longis.

Japan. Pref. Mie (Prov. Iga): Akame-kei, T. Kurokawa, type in Herb. Univ. Kyoto; ibid., Tagawa 3517(K). Pref. Oosaka: Mt. Iwawaki, K. Seto(K).

This species has, no doubt, a very close affinity to *P. ovato paleaceum* (Kodama) H. Ito ex Makino, Ill. Fl. Jap. 943. 1940, as syn. Nevertheless, the lower large scales on stipe are very similar to those of *P. Makinoi* Tagawa and *P. pseudo-Makinoi* Tagawa in the colour, the lustre, and the texture.

(48) *Thelypteris cyclolepis* (C. Chr. et Tardieu) Tagawa, comb. nov.—*Athyrium cyclolepis* C. Chr. et Tardieu, Bull. Mus. Paris II. 6: 109, figs. 3, 4. 1934.

Annam. Dran, Prov. Lang-Biang, Poilane 3956 (K).

(49) *Thelypteris viridifrons* Tagawa, Journ. Jap. Bot. 12: 747. 1936, type from Uzi near Kyoto, Japan.

Korea. Prov. Zennan austr.-occ.: Mt. Daiton, Chang 142, 1608 (K).

New to Korea; wide-spread in warm districts of Japan, but not so common as *T. oligophlebia* var. *elegans* (Koidz.) Ching.

(50) *Abacopteris simplex* (Hook.) Ching var. *trifoliata* Ching, Bull. Fan Mem. Inst. Biol. 10: 10. 1940, type from Fukien, China.

Formosa. Prov. Taitō: near Aroe Taitō-gun, Tagawa 2400, 2444 (K); near Tyōkakurai, Taitō-gun, Tagawa 2644 (K); near Syussuiha, Taitō-gun, Tagawa 2435 (K).

New to Formosa. The type variety of *A. simplex* is also not uncommon in southern Formosa (cf. Tagawa, Acta Phytotax. Geobot. 8: 171. 1939); additional specimens are:

Prov. Taitō: near Aroe, Taitō-gun, Tagawa 2410 (K); near Tyatyagatoan, Taitō-gun, Tagawa 2486 (K); near Tyōkakurai, Taitō-gun, Tagawa 2738 (K).

(51) *Neolepisorus ensatus* (Thunb.) Ching f. *monstrifer* Tagawa, f. nov.

Lamina a medio deorsum segmentis subpatentibus, aliis lanceolatis acutis vel acuminatis ad 10 cm longis 2 cm latis, aliis brevioribus oblongis obtusis utrinque irregulariter praedita.

Japan. Pref. Ehime: Tokuda-mura, Syūsō-gun, M. Kunihiro, type in Herb. Univ. Kyoto. Pref. Kumamoto: along the Riv. Kuma, Asikita-gun, H. Kaneda (K).

This new form corresponds to f. *deltoidea* (Bak.) Ching of *N. phyllomanes* (Christ) Ching (cf. Ching, Ic. Fil. Sin. 2: pl. 89, f.1 a. 1934). The occurrence of these forms in *Neolepisorus* proves that the genus *Neochiropteris* Christ can be derived from that genus.

(52) *Pyrrosia lingua* (Thunb.) Farwell f. *monstrifera* Tagawa, f. nov.

Lamina e basi cuneata ovato-lanceolata vel late lanceolata, a medio deorsum segmentis elongato-triangularibus vel lanceolatis acutis vel acuminatis utrinque irregulariter praedita.

Japan. Pref. Hyōgo: Isl. Kemuri-zima near Hukura, Awazi, K. Yamadori, type in Herb. Univ. Kyoto. Pref. Ehime: Uwazima, T. Imaizumi (K).

(44) ヒマラヤ、チベットから支那西南部に分布している *Onychium contiguum* (Wall.) Hope は臺灣の高地にもある。

(45) ヒマラヤから支那西南部、トンキンに分布している *Asplenium ensiforme* Wall. の包膜は淡褐色で邊緣に小さい齒牙狀の凹凸があるが、臺灣のホコガタシダの包膜は全邊で縁の色が濃いから、變種にして學名を *A. ensiforme* var. *bicuspe* (Hayata) Tagawa とする。

(46) ヒマラヤから支那にある *Athyrium subtriangulare* (Hook.) Bedd. はカラフトミヤマシダ *A. spinulosum* (Maxim.) Milde と同種にされているが、別種である。

(47) アカメキノデ *Polystichum Kurokawae* Tagawa はツヤナシキノデによく似ているが、葉柄の下部には黒褐色で光澤のある硬い鱗片がある。

(48) 安南の *Athyrium cyclolepis* C. Chr. et Tardieu の學名を *Thelypteris cyclolepis* (C. Chr. et Tardieu) Tagawa とする。

(49) ミドリヒメワラビ *Thelypteris viridifrons* Tagawa は南鮮にもある。

(50) ヒトツバカウモリシダが三葉になつた *Abacopteris simplex* (Hook.) Ching var. *trifoliata* Ching は臺灣の南部にもある。

(51, 52) クリハランの葉の兩側に不規則に突起の出たものを *Neolepisorus ensatus* (Thunb.) Ching f. *monstrifer* Tagawa, ヒトツバが同様の形になつたものを *Pyrrosia lingua* (Thunb.) Farwell f. *monstrifera* Tagawa とする。

---

### Correction

#### Vol. XXIV, p. 119, lines 19-23

Montibus centralibus ad 10000 ped. alt., Mori 2363 (T), type. Prov. Kwarenkō: between Miharasi and Seraoka, Kwaren-gun, Tagawa 762 (K); between Ubō and Takimi, Kwaren-gun, Tagawa 3718 (K); between Kirai and Kirisato, Kwaren-gun, Tagawa 3728 (K); between Rakura and Tōkatu, Tamazato-gun, Tagawa 3651 (K). Prov. Taitō: between Tatibana and Tōrin, Kwanzan-gun, Tagawa 3259 (K).

---